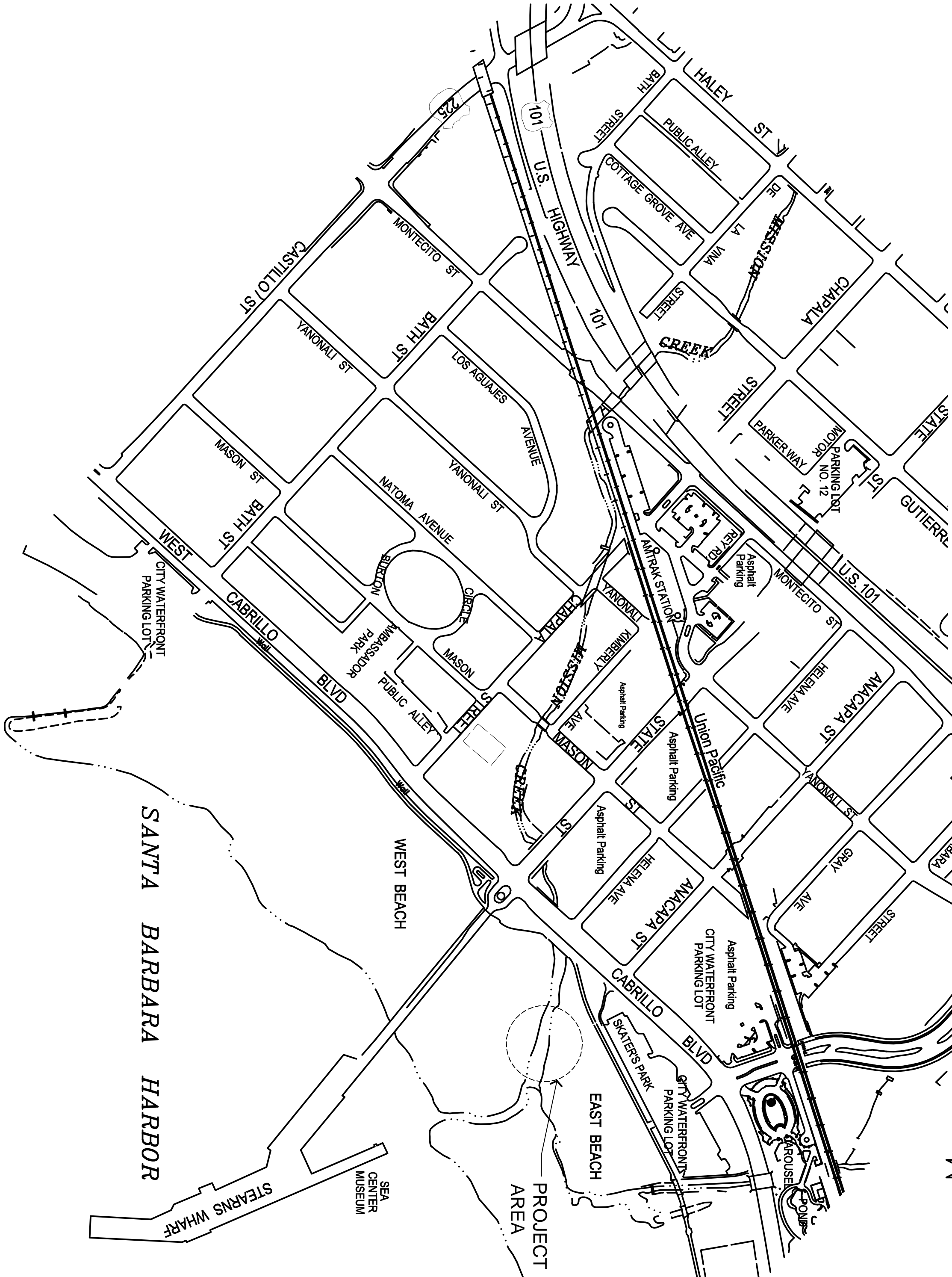
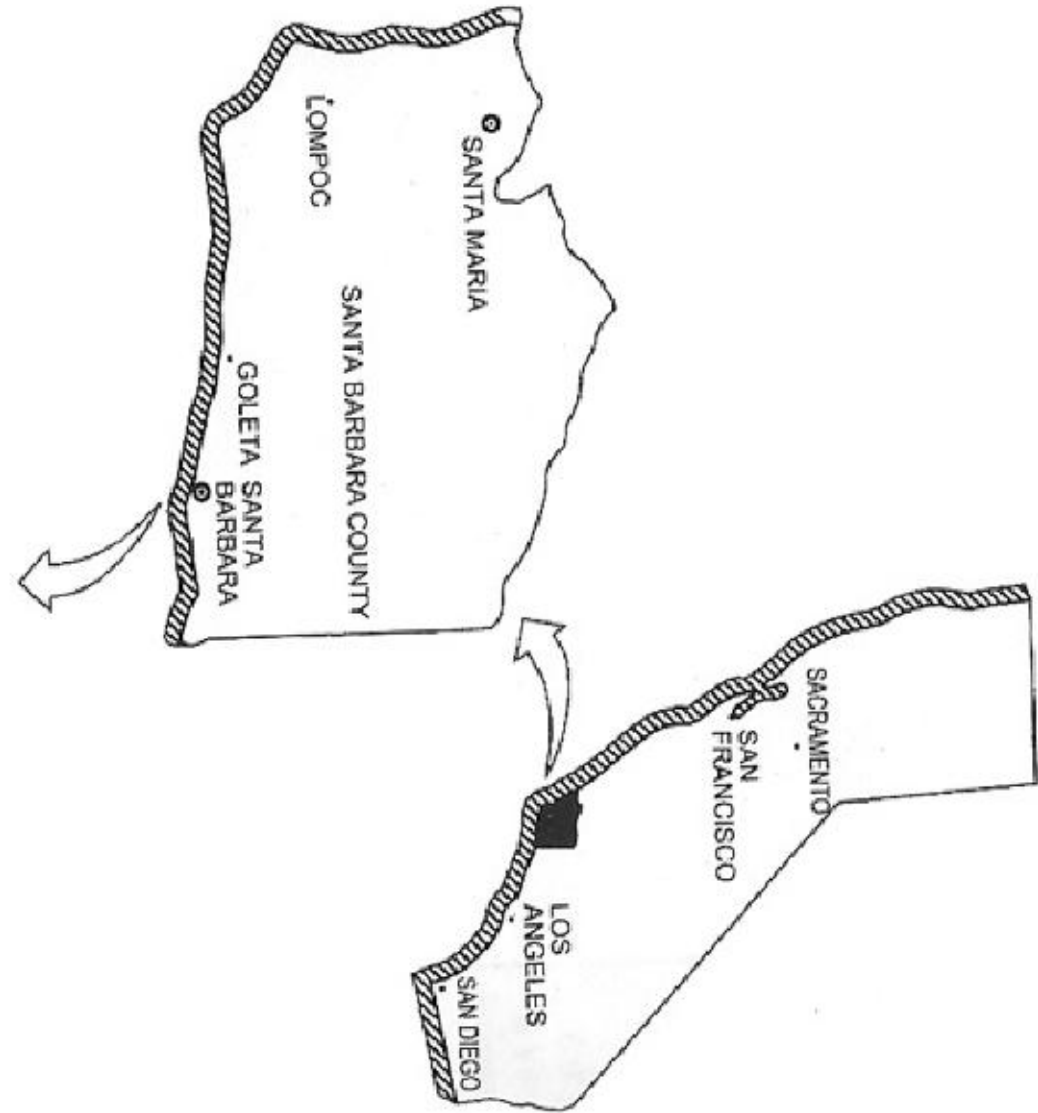


The City of Santa Barbara Department of Public Works

PROJECT PLANS FOR CONSTRUCTION

LAGOON RESTORATION PROJECT

At Mission Creek



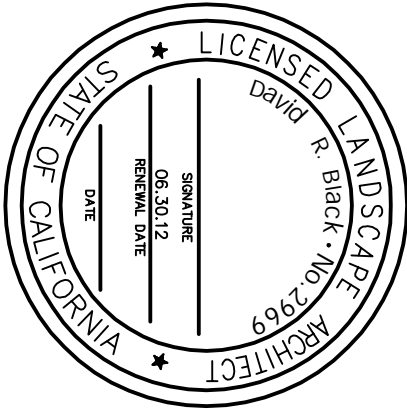
SHEET INDEX

Landscape Plans

Sht. Description

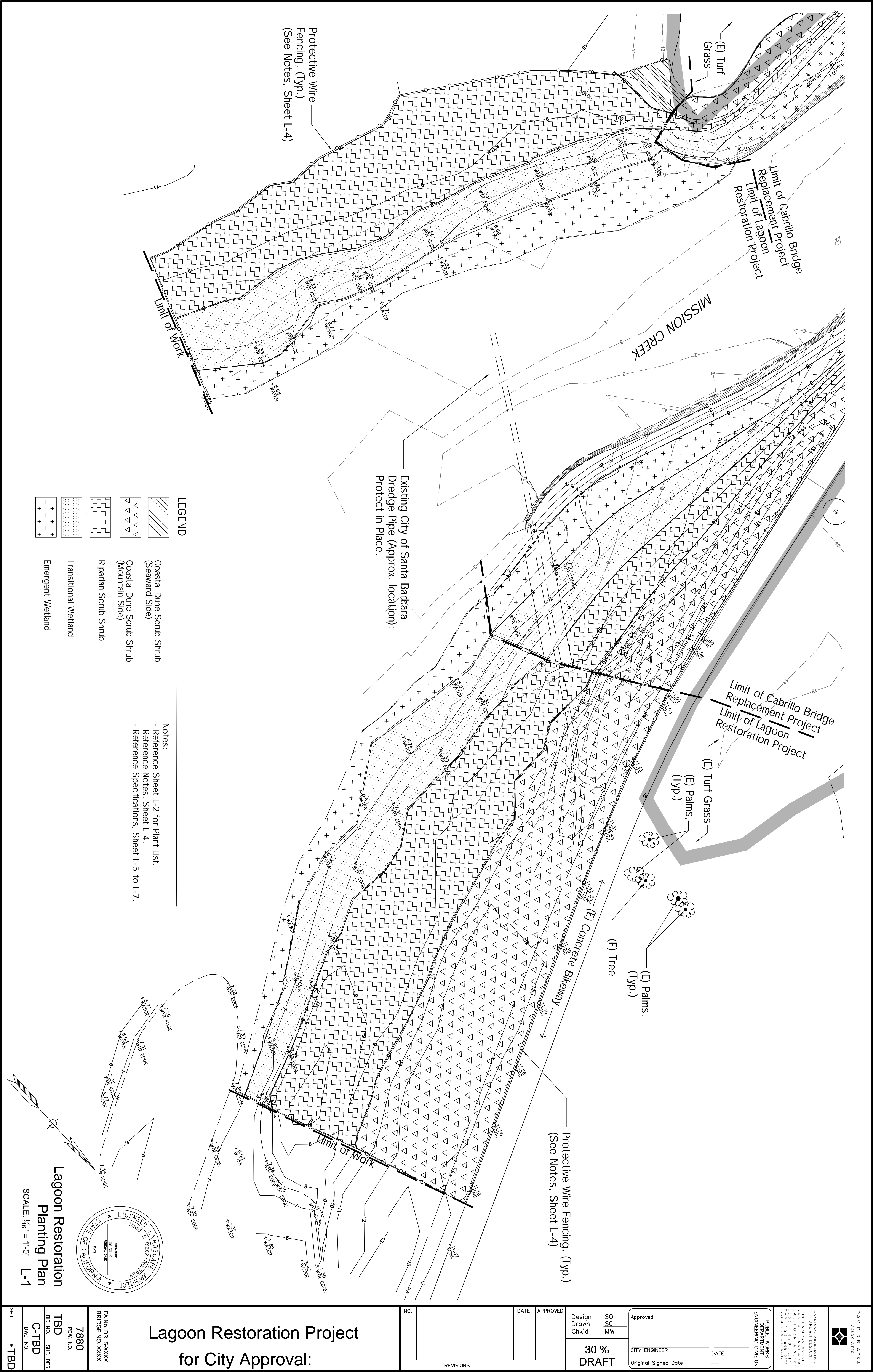
Sht Nos.

Title Sheet	T-1
Planting Plan	L-1
Planting Legend	L-2
Irrigation Plan	L-3
Details & Notes	L-4
Planting Specifications	L-5
Irrigation Specifications	L-6
Maintenance Specifications	L-7

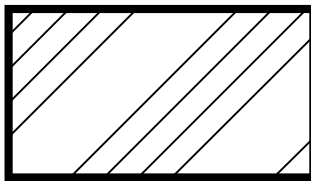


Lagoon Restoration
Title Block
T-1

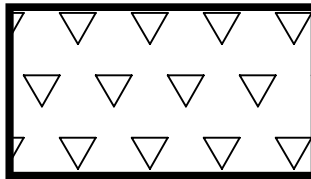
DAVID R. BLACK & ASSOCIATES		LAGOON RESTORATION PROJECT URBAN DIVISION 1717 PAMPAS AVENUE SANTA BARBARA, CALIFORNIA 93101 (805) 964-8712 FAX (805) 964-8713 WWW.DRB-ASSOCIATES.COM		PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION		Approved: _____ CITY ENGINEER Original Signed Date _____ DATE _____		30 % DRAFT		Design: SQ Drawn: SQ Chk'd: MW		APPROVED DATE		NO.							
Lagoon Restoration Project for City Approval:														REVISIONS							
7880 PBK. NO.														TBD BD NO.		SHT. DES.		C-TBD DWG. NO.		SHT. OF TBD	



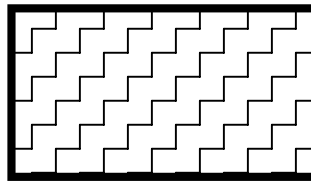
PLANT LEGEND



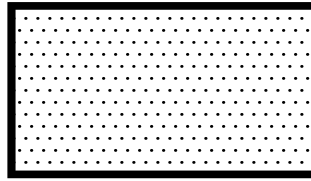
Scientific Name	Common Name				
Coastal Dune Scrub (seaward side) spacing: 6'-0"					
Estimated Area: 300 square feet					
		Status	Seed Source	Size	Quantity
<i>Abronia umbellata</i> spp. <i>umbellata</i>	Purple Sand Verbena		COPR/UCSB	1 gallon	2
<i>Ambrosia chamissonis</i>	Beach-Bur		COPR/UCSB	1 gallon	3
<i>Atriplex lentiformis</i>	Salt Bush			1 gallon	1
<i>Atriplex leucophylla</i>	Beach Saltbush		SBA/UCSB	1 gallon	2
<i>Calystegia soldanella</i>	Dune Morning-Glory		COPR	1 gallon	1
<i>Camissonia cheiranthifolia</i>	Beach Evening-Primrose		COPR/UCSB	1 gallon	3
<i>Distichlis spicata</i>	Salt Grass		SBA	1 gallon	1
				TOTAL	13



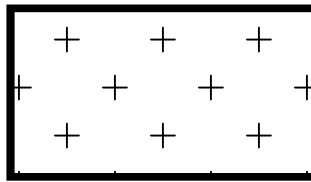
Coastal Dune Scrub (mountain side) spacing: 4'-0"					
Estimated Area: 8,400 square feet					
		Status	Seed Source	Size	Quantity
<i>Abronia umbellata</i> spp. <i>umbellata</i>	Purple Sand Verbena		COPR/UCSB	1 gallon	90
<i>Ambrosia chamissonis</i>	Beach-Bur		COPR/UCSB	1 gallon	90
<i>Atriplex lentiformis</i>	Salt Bush			1 gallon	60
<i>Atriplex leucophylla</i>	Beach Saltbush		SBA/UCSB	1 gallon	90
<i>Calystegia soldanella</i>	Dune Morning-Glory		COPR	1 gallon	30
<i>Camissonia cheiranthifolia</i>	Beach Evening-Primrose		COPR/UCSB	1 gallon	90
<i>Distichlis spicata</i>	Salt Grass		SBA	1 gallon	60
<i>Eriogonum parvifolium</i>	Coastal buckwheat			1 gallon	30
<i>Isocoma menziesii</i> var <i>vernonioides</i>	Coast Goldenbush		SBA	1 gallon	60
				TOTAL	600



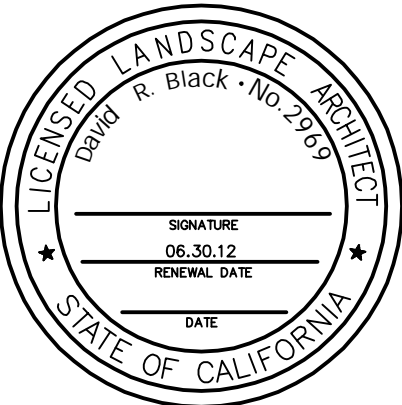
Riparian Scrub spacing: 6'-0"					
Estimated Area: 12,840 square feet					
		Status	Seed Source	Size	Quantity
<i>Artemisia douglasiana</i>	Mugwort			1 gallon	103
<i>Baccharis douglasii</i>	Marsh baccharis			1 gallon	82
<i>Baccharis salicifolia</i>	Mulefat			1 gallon	20
<i>Distichlis spicata</i>	Saltgrass			1 gallon	125
<i>Isocoma menziesii</i> var <i>vernonioides</i>	Coast Goldenbush		SBA	1 gallon	40
<i>Leymus triticoides</i>	Blue wild rye			1 gallon	40
				TOTAL	410



Transitional Wetlands spacing: 2'-0"					
Estimated Area: 7,050 square feet					
<i>Atriplex californica</i>	Saltbush		SBA	1 gallon	203
<i>Cressa truxillensis</i> var. <i>truxillensis</i>	Alkali Weed		SBA	1 gallon	101
<i>Distichlis spicata</i>	Salt Grass		SBA	1 gallon	405
<i>Frankenia salina</i>	Alkali heath		SBA	1 gallon	405
<i>Jaumea carnosa</i>	Jaumea		SBA	1 gallon	203
<i>Monanthochloe littoralis</i>	Shoregrass		SBA	1 gallon	101
<i>Salicornia virginica</i>	Pickleweed		SBA	1 gallon	405
<i>Suaeda taxifolia</i>	Wooly sea-blite			1 gallon	203
				TOTAL	2026



Emergent Wetlands spacing: 2'-0"					
Estimated Area: 4,460 square feet					
<i>Jaumea carnosa</i>	Jaumea		SBA	1 gallon	256
<i>Scirpus maritimus</i>	Seaside bulrush			1 gallon	385
<i>Scirpus robustus</i>	Sturdy bulrush			1 gallon	256
<i>Salicornia virginica</i>	Pickleweed		SBA	1 gallon	385
				TOTAL	1282
Notes:					
SBA= Santa Barbara Airport					
COPR= Coal Oil Point Reserve					
UCSB= University of California Santa Barbara					



Lagoon Restoration
Plant List
L-2



LANDSCAPE ARCHITECTURE
URBAN DESIGN
1718 PAMPAS AVENUE
SANTA BARBARA,
CALIFORNIA 93101
(805) 898-8717
FAX 805 898-0373
e-mail: drblack@earthlink.net

PUBLIC WORKS
DEPARTMENT
ENGINEERING DIVISION

Approved:	CITY ENGINEER	DATE
	Original Signed Date	

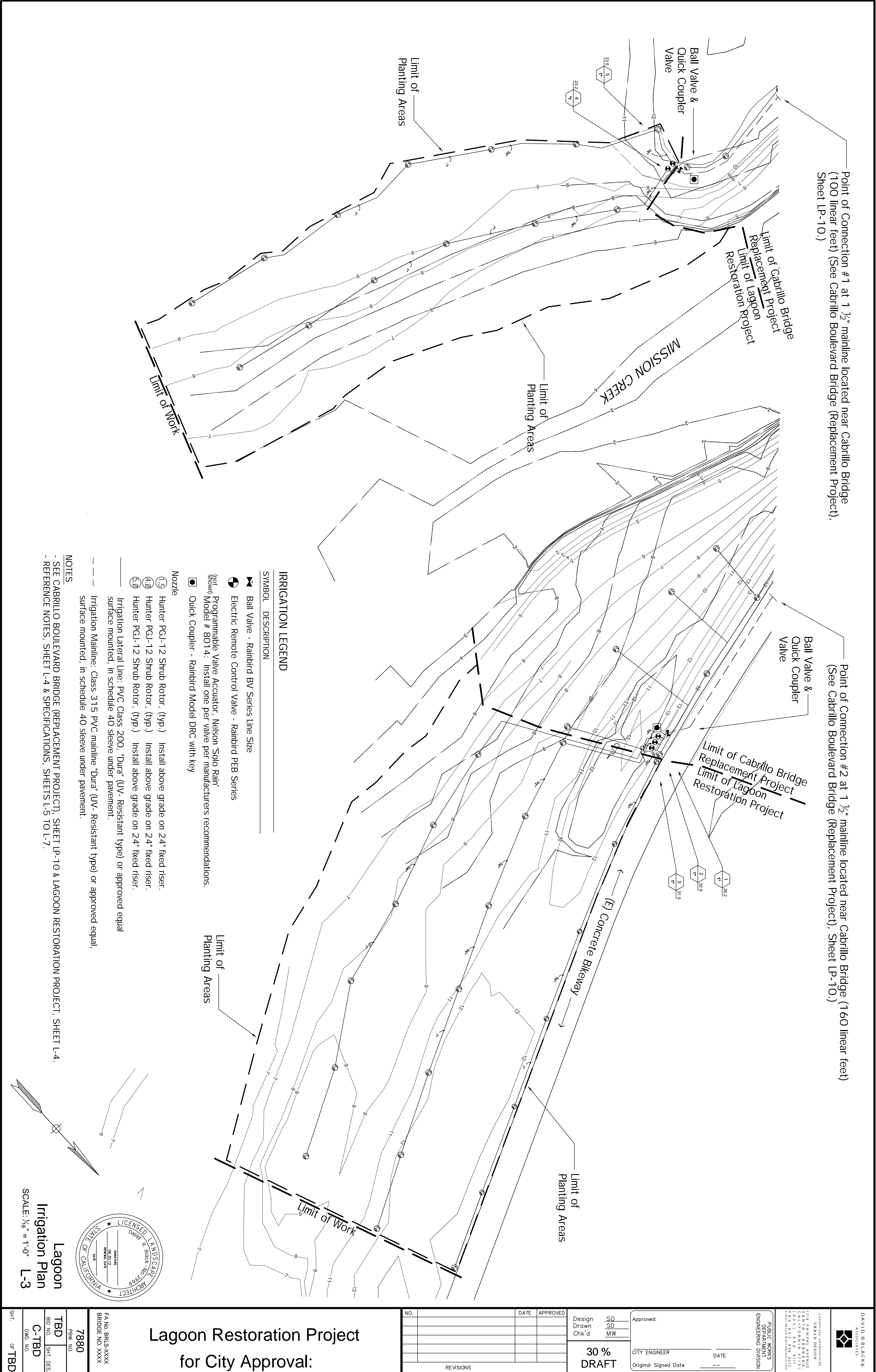
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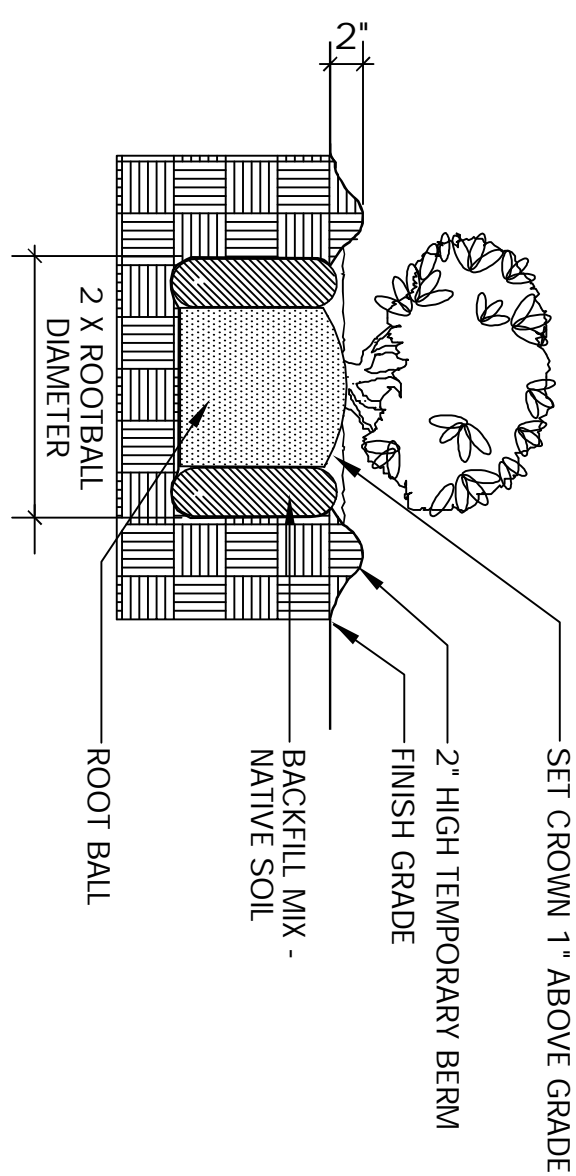
NO.	DATE	APPROVED	REVISIONS

Lagoon Restoration Project
for City Approval:

FA No. BRLS-XXXX
BRIDGE NO. XXXX

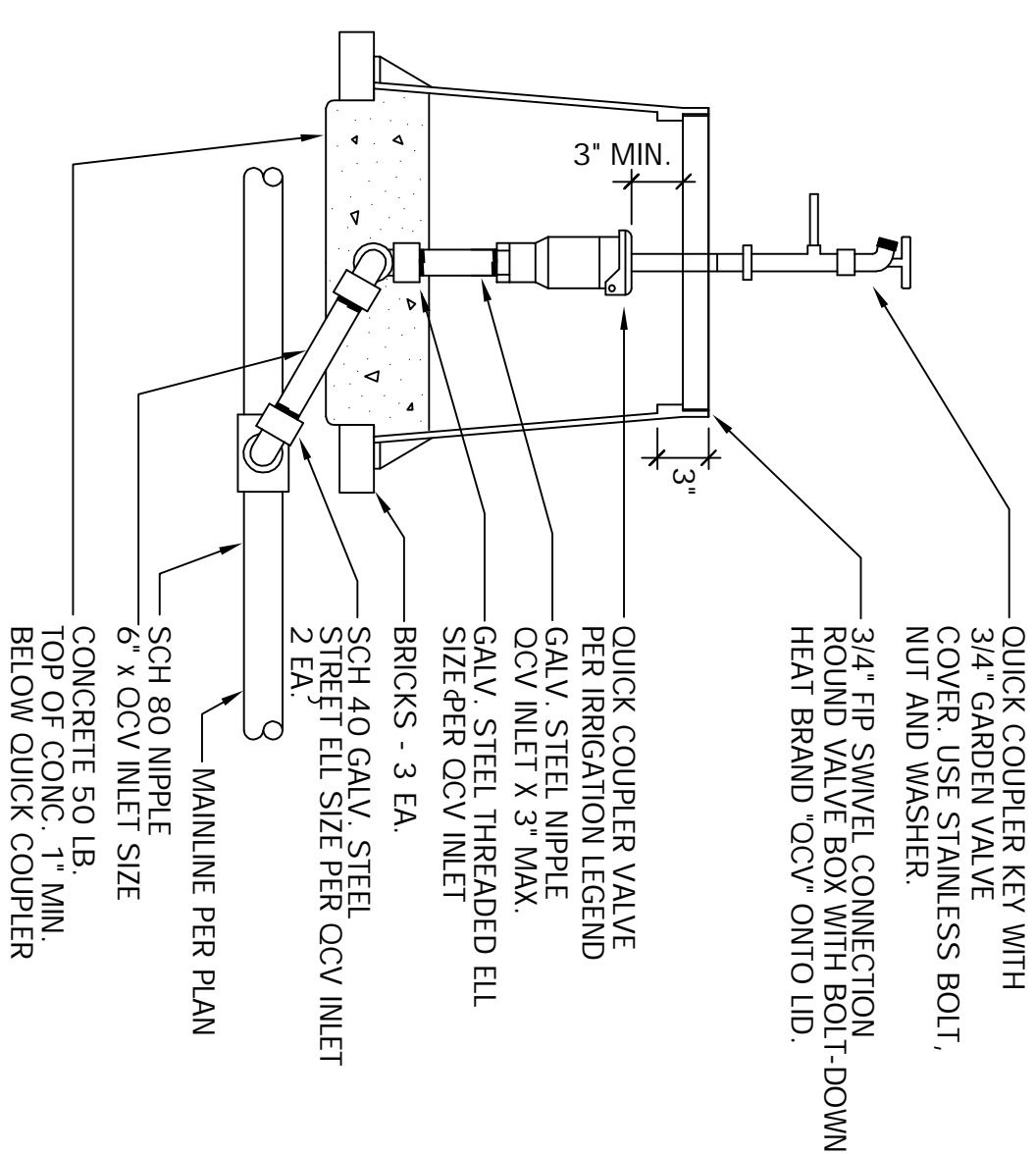
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	C-TBD DWG. NO.	
SHT.		OF TBD





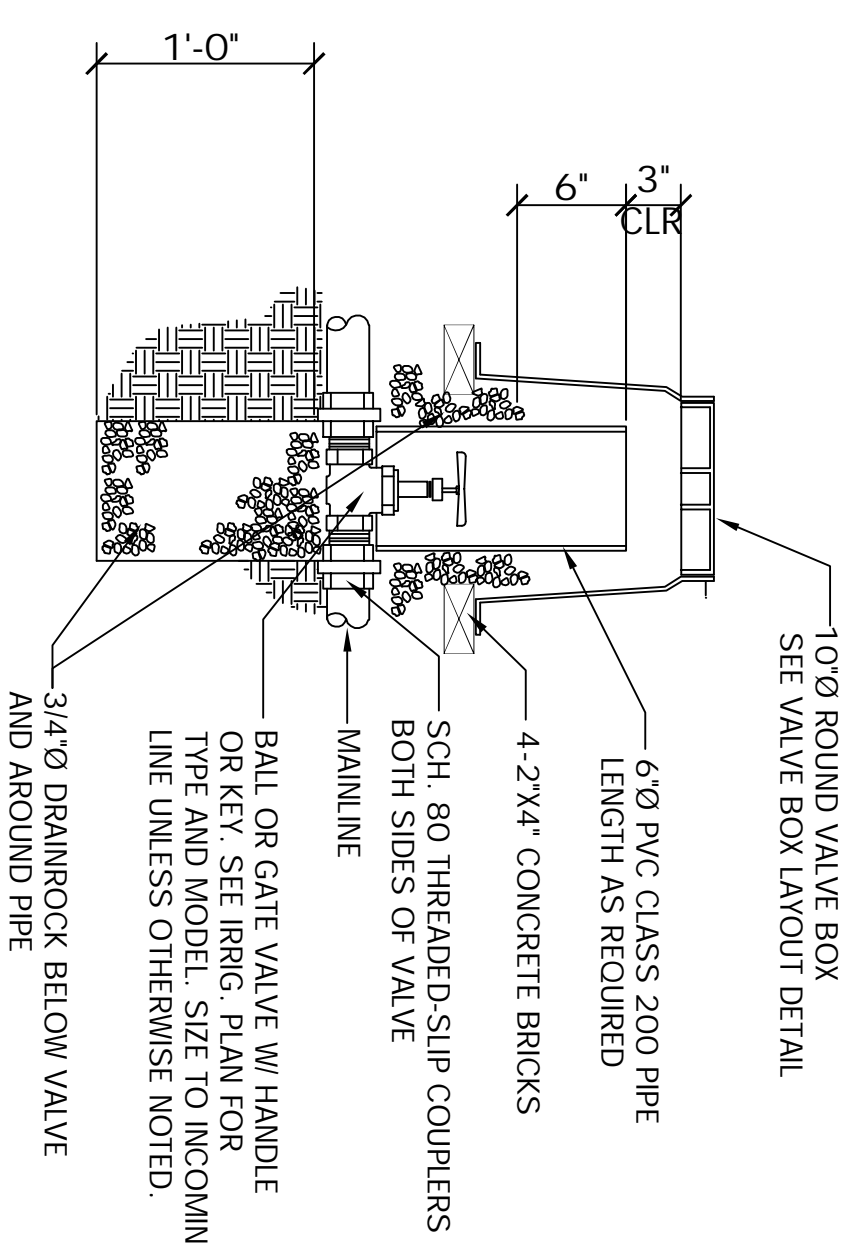
SHRUB/TREE PLANTING

NOT TO SCALE



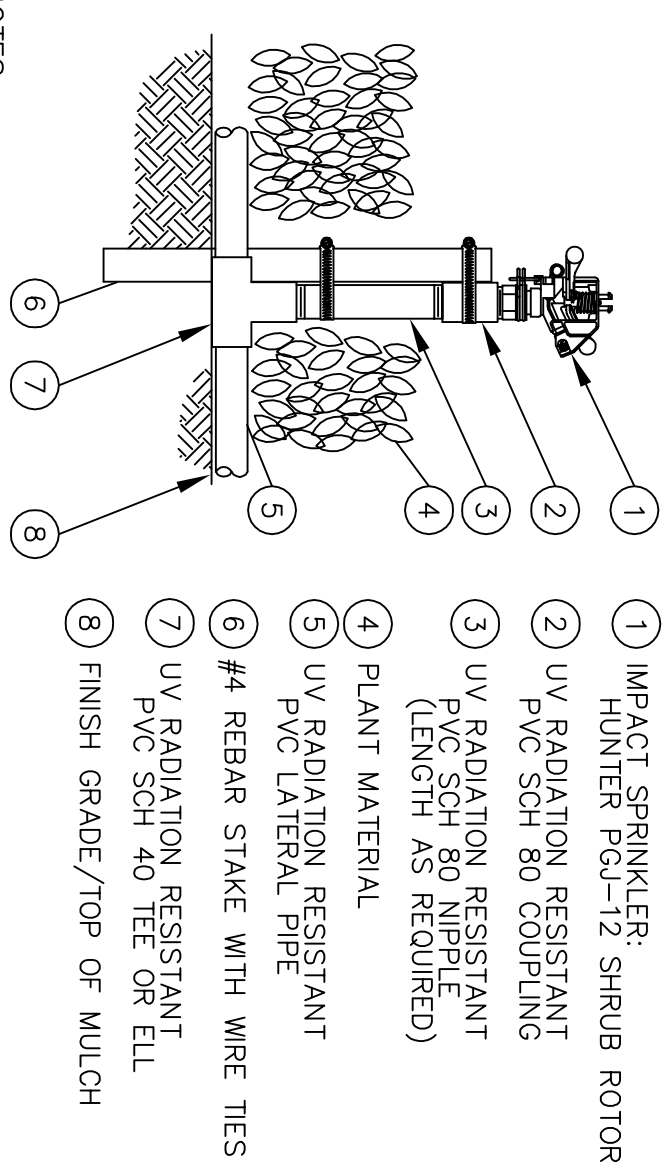
QUICK COUPLER VALVE

INSTALL ABOVE GRADE



BALL VALVE

INSTALL ABOVE GRADE

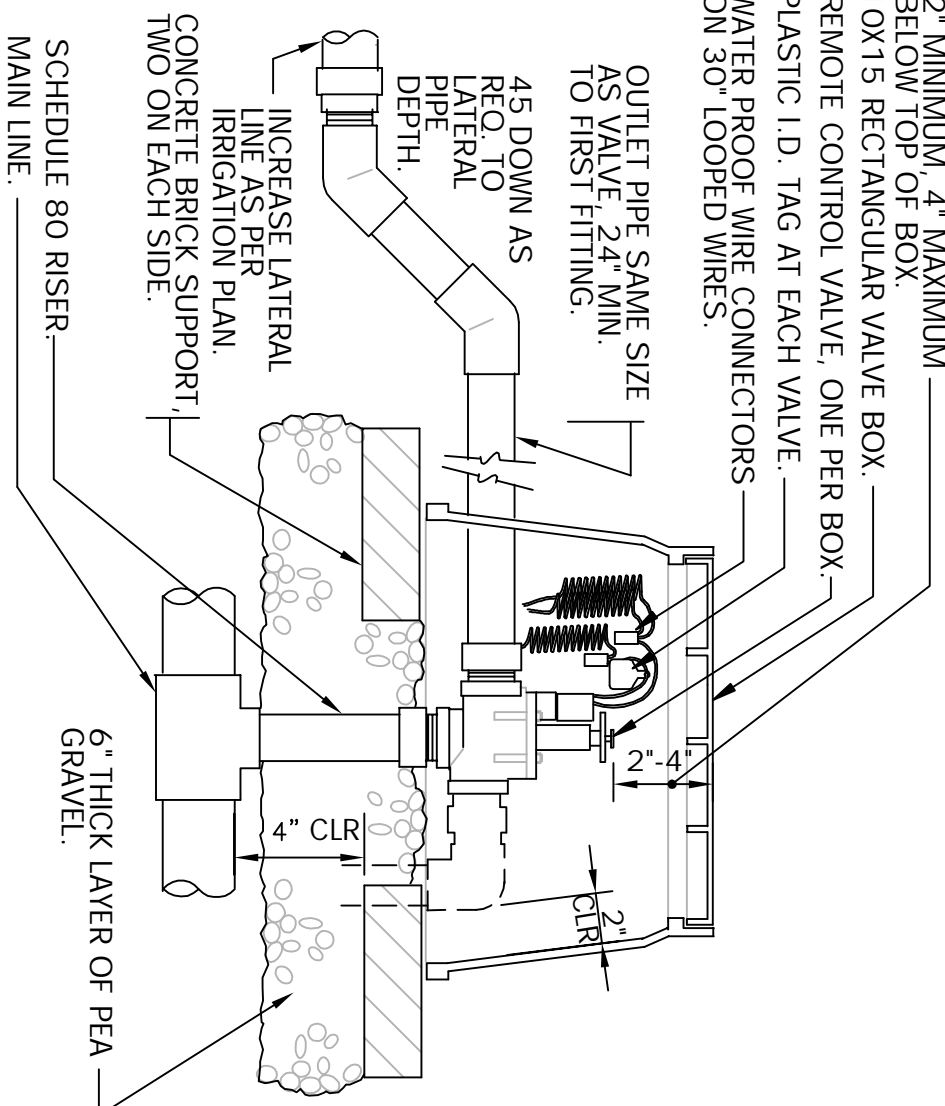


NOTES:

- A SWING PIPE ASSEMBLY MAY BE USED WITH FLOWS LESS THAN 4 GPM.
- USE #4 X 24" REBAR ROD WITH "J" HOOKED RADIUS AT ONE END TO HOLD PIPE SECURELY IN PLACE. INSTALL AT INTERVALS OF 10 FEET.

SHRUB ROTOR ON 24" FIXED RISER

INSTALL ABOVE GRADE



ELECTRIC REMOTE CONTROL VALVE

INSTALL ABOVE GRADE

- ### General Restoration Notes

General Restoration Notes

1. The Contractor shall remove and dispose of all invasive plant species within the project limits. Removal shall be at the direction of the Engineer and the Restoration Specialist.

2. All invasive plant species shall be removed from all development and restoration area throughout the designated plant establishment period.

3. Herbicides shall not be used within the Mission Creek habitat unless otherwise approved. Target non-native or invasive species shall be removed by hand.

4. Rodenticides containing any anti-coagulant compounds (including but not limited to Warfarin, Brodifacoum, Bromadiolone or Diphacinone), shall not be used

Planting Notes

1. Areas to be planted are shown on sheet L-1. Plant species, quantities, and sources are shown on the Plant List, sheet L-2. All plants shall be 1-gallon container size.

2. All plant materials shall be contract-grown by a designated native plant nursery (See specifications). The nursery supplier shall deliver all container plants to site.

Wire Protective Fencing

1. Upon completion of planting operations, the Contractor shall provide and install protective wire fencing around the restoration areas as designated on the plans. The fencing shall be vinyl-coated galvanized welded wire mesh, 14 gauge, 1"x2" openings, 48" finish height, with painted steel stakes and galvanized wire ties. Vinyl and stake color: Green.

2. Final protective fencing layout shall be approved by the Engineer prior to construction.

1. See Irrigation Legend on sheet L-3 for a complete description of all symbols shown on this plan.

- It is the intention of the upstream irrigation system design to provide a temporary above-grade overhead spray irrigation system for the purpose of irrigating all restoration plantings shown on sheet L-3. The Contractor is responsible for making any adjustments to the layout of the irrigation system to insure 100% irrigation coverage of all plantings.

3. The irrigation point-of-connection (P.O.C.) is at the 1-1/2" pressure mainline (see Cabillio Blvd. Bridge Replacement Irrigation Plan, Sheet L-10) at the east side of the downstream bridge railing. Verify location with Engineer. Provide a line-size ball valve in a round valve box.

4. All irrigation system equipment (valves, valve boxes, irrigation heads, pressure and lateral lines) shall be installed above grade. Fasten all equipment to grade with rebar staples and stakes.

5. The irrigation system is designed assuming a static water pressure of a minimum of 75 psi at the point of connection. Prior to installation of irrigation system, contractor shall verify pressure at point of connection and report any discrepancy to the Engineer.

5. The Contractor shall provide and install battery-operated control actuators on each remote control valve as shown on the irrigation legend. Program each actuator to provide optimum irrigation to all restoration plantings after planting and during the plant establishment period.

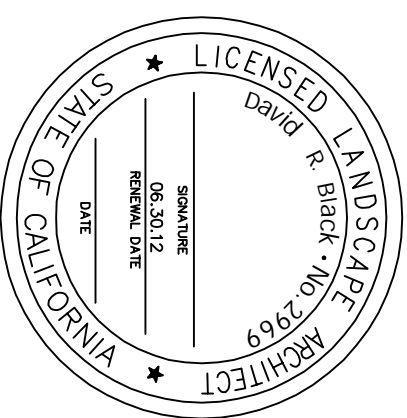
7. All valves shall be installed in locking plastic valve boxes in shrub areas (maximum 2'-0" from edge of concrete paving for ease of access). Install one valve per box. Verify final location with Engineer.

3. All quick couplers and ball valves shall be installed in round valve boxes and located within 2 feet of pavement for ease of access. Verify final location with the Engineer.

9. It shall be the contractor's responsibility to install the irrigation system in accordance with all local codes.

10. Indicated pipe locations are schematic. Do not place pipe under concrete paving except where absolutely necessary. Irrigation contractor shall coordinate pipe installation with other trades.

11. All piping installed under paving, through walls or footings shall be placed inside schedule 40 PVC sleeves of adequate size to allow free movement of the pipe in the sleeve.



Lagoon Restoration Details & Notes

L-4

OF TBD

Lagoon Restoration Project for City Approval:

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<p>7880</p> <p>PBR. NO.</p> <p>TBD</p> <p>BD NO.</p> <p>SHT. DES.</p> <p>C-TBD</p> <p>DWG. NO.</p>		<p>Approved: _____</p> <p>CITY ENGINEER _____</p> <p>Original Signed Date _____</p> <p>DATE _____</p>	
<p>FA No. BR/S-XXXX</p> <p>BRIDGE NO. XXXX</p>		<p>REVISIONS</p>	

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